

## Great expectations:

Armour, Kathleen; Makopoulou, K.

DOI:

[10.1016/j.tate.2011.10.006](https://doi.org/10.1016/j.tate.2011.10.006)

License:

None: All rights reserved

*Document Version*

Peer reviewed version

*Citation for published version (Harvard):*

Armour, K & Makopoulou, K 2012, 'Great expectations: Teacher learning in a national professional development programme', *Teaching and Teacher Education*, vol. 28, no. 3, pp. 336-346.  
<https://doi.org/10.1016/j.tate.2011.10.006>

[Link to publication on Research at Birmingham portal](#)

### **Publisher Rights Statement:**

Checked for eligibility: 21/09/2016

### **General rights**

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

### **Take down policy**

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact [UBIRA@lists.bham.ac.uk](mailto:UBIRA@lists.bham.ac.uk) providing details and we will remove access to the work immediately and investigate.

1    **Abstract (max. 100 words)**

2    This paper reports findings from an evaluation of a national continuing professional  
3    development (CPD) programme for teachers in England. Data showed that the  
4    localized implementation, opportunities for interactive learning, and ‘collective  
5    participation’ were positive factors. Research participants reported difficulties,  
6    however, in ‘cascading’ knowledge to colleagues and in sustaining and developing  
7    their learning. It is argued that these limitations were rooted in an inconsistent theory  
8    of learning that underpinned the programme and a failure to conceptualize teachers as  
9    ‘lead learners’ in schools. Wider implications for the design of teachers’ professional  
10   development are considered.

11   **Key Words: teacher learning, professional development, learning theory,**  
12   **physical education and school sport.**

13

## 14     **Introduction**

15             The purpose of this paper is to report findings from the evaluation of an  
16 innovative national professional development programme, and to consider wider  
17 implications for the design and conduct of teachers' professional development within  
18 and beyond physical education. The professional development programme was  
19 'innovative' in that it was designed and monitored nationally, but delivered locally in a  
20 newly developed delivery framework to ensure teachers' needs were met. In addition,  
21 new features included an attempt to base the design of the programme on research  
22 findings on effective CPD; it was made available (free of charge) to all teachers and  
23 other adults responsible for curricular and extra-curricular physical education and  
24 school sport in English schools; and was subject-based but with stated aspirations to  
25 deliver wider school outcomes. The task of the researchers was to find out whether the  
26 structures and opportunities provided through the new programme were indeed  
27 appropriate to teachers' needs, and whether the ambitious programme aims were  
28 achieved. The findings raise questions about the implications of basing professional  
29 development design on inconsistent theories of teachers as learners, and on specific  
30 and arguably limited understandings of teaching as a profession.

31             The paper is organised into six sections. In section 1, the policy context is  
32 summarised for professional development in teaching and the introduction of the new  
33 programme. Section 2 provides an overview of the international research on teacher  
34 professional learning. In section 3, a concise overview of the aims, organisation and  
35 delivery of the National Physical Education and School Sport Continuing Professional  
36 Development (PESS-CPD) programme is provided to orient readers. Section 4  
37 provides detail on the evaluation research design, rationale and process; and in

sections 5 and 6, findings are reported and wider implications for teachers' professional learning discussed.

## **1. Professional learning in the profession of teaching**

Teaching is usually recognised as a profession even though it is not always accorded the same status as some other professions (Hargreaves, Cunningham et al., 2007; Shulman, 2000). As members of a profession, teachers in many countries are bound by professional standards and a code of ethics but, even so, it has been argued that teaching fails to fulfil all the requirements associated with the title 'profession' (Helsby, Knight, McCulloch, Saunders and Warburton, 1997). One of the key characteristics of any recognised profession is practitioners who have both the right and the responsibility to engage in appropriate and effective career-long professional learning (Brunetti, 1998). The reason for this requirement is clear: a profession exists to serve its clients, and a professional practitioner should be able to draw upon best knowledge at any given time to serve clients effectively. It could be argued, therefore, that members of professions are, by definition, lifelong learners. Furthermore, because it is an education profession, it might be reasonable to expect that teaching would be in the vanguard of continuing professional development (CPD) policy and practice; an example from which other professions could learn. To date, however, there is little evidence to suggest that this is the case. Indeed, Borko (2004, p. 4) famously described much existing CPD for teachers as 'woefully inadequate', and this provides an interesting backdrop for the introduction of a new approach to professional development in the national programme at the centre of this paper.

Although the nature, quality and effectiveness of teachers' career-long professional learning remain of concern both nationally and internationally (Wayne,

Suk Yoon et al., 2008) there is recent evidence of an increased awareness of the importance of CPD. In Europe, contemporary national policies on education, teacher education and CPD are underpinned by visions of a 'knowledge driven' society in which lifelong learning is a key feature. The vision is that with adequate and sustained support, citizens / employees should develop their capacities to become autonomous and independent learners who are able to be innovative, think critically and creatively, work collaboratively, and take risks (August et al., 2006; European Commission, 2008). In this context, schools and teachers have been identified as 'the single most important asset in the achievement of the vision of a learning society' (Day, 2002, p. 431). If schools are to deliver what seems to be required, however, effective and appropriate career-long professional development for the teaching workforce would seem to be an essential ingredient.

In the context of these international trends, the provision of ongoing, personalised, and tailored CPD opportunities for all teachers in England became a priority under the previous government (Day, 2002; General Teaching Council [GTC], 2007). A national strategy for teacher professional development was instituted (GTC, 2000) and expanded (GTC, 2007) with aspirations to develop the school workforce as part of an integrated approach to improving pupils' lives (August et al., 2006; Training and Development Agency for Schools [TDA], 2007). More recently however, the new Coalition government in the UK has stepped back from the notion of funding national strategies for professional development, preferring instead to let schools take greater responsibility for teachers and their professional development (<http://www.education.gov.uk/>). This represents an important shift in the ways in which the teaching profession is viewed. It could be argued, for example, that allowing schools to lead professional development is precisely in tune with the international

CPD research suggesting that top-down, mandated and standardised professional development is inadequate for many teachers (e.g. Day and Townsend, 2009). On the other hand, there are concerns that CPD will be a low funding priority for schools and, as Pedder, James and Macbeath (2005) have illustrated, not all schools have the capacity or expertise to become the kind of learning organisation that can support and extend teachers' professional development.

It was in the national policy context of the previous government, between 2000-2009, that the CPD programme at the centre of this paper was established and rolled out. It is important to recognise, therefore, that although the programme designers were keen to base the design of the programme on research findings, and to meet the individual development needs of teachers and schools, there was a strong underpinning philosophy of central government control expressed in the overarching programme aims. This contextual information is important because, as Timperley (2008) argued in a review of teacher learning:

Professional learning is strongly shaped by the context in which the teacher practises. This is usually the classroom, which, in turn, is strongly influenced by the wider school culture and the community and society in which the school is situated. (p. 6)

The national context in which the new National Physical Education and School Sport Continuing Professional Development Programme (referred to in this paper as the 'National PESS-CPD Programme' or 'the Programme') was established was one of expansion in government spending. The CPD Programme was funded by the UK central government (£35 million) and launched in 2003. It was designed for those responsible for delivering 'Physical Education and School Sport' (referred to as PESS

throughout this paper<sup>1</sup>) and it was made available to all relevant teachers (and other adults) in all government funded primary, secondary and special schools (which is the vast majority of schools in England). The aims of the Programme were broad, extending beyond improving pupils' engagement in PESS to include wider educational benefits linked to whole school improvement and increasing physical activity levels for health. The Programme CPD activities were delivered free of charge for teachers, although teacher replacement costs for schools were not covered. Initially, the Programme was planned to run until 2006, but supplementary funding enabled an extension to 2008 and elements of it continue to run today, albeit in a different structural and financial format and without the same national-level monitoring. At the time of writing, it seems unlikely that the current government will continue to support professional development in this format.

From January 2004 to March 2008, the authors were commissioned to undertake an evaluation of the National PESS-CPD Programme. The purpose of the evaluation was to explore the complex process of teacher learning and to provide evidence of different forms of impact within and beyond PESS.

## **2. CPD and PE-CPD Research: Teachers as learners**

Although beliefs about the importance of teachers' CPD are not new (Bradley, 1991), in 2000, the UK government of the time placed a renewed emphasis on CPD. This set the tone for much of what followed in the decade, including the Programme that is the focus of this paper. In explaining its conceptualisation of teaching, the government

---

<sup>1</sup> Physical Education and School Sport – or PESS – is the label used in England to denote curricular and extra-curricular physical education activities and a range of linked school-level sports competitions and opportunities. It is a term that was introduced as part of the previous government's extensive strategy to increase opportunities for physical education and sport in state funded schools.

argued that 'We need teaching to become a learning profession' and, moreover, stated their belief that it is essential for teachers 'to feel they own the professional development framework' (DfEE, 2001, p. 2). It was also suggested that teaching could learn something from other professions. Perhaps the key legacy of all the changes, however, was the emerging recognition that teacher learning is a complex and multifaceted activity that requires a range of different approaches if it is to be effective. In the USA, Guskey (1994; 2002) had made the much repeated comment that there is no single form of CPD that is appropriate for all teachers; what is required is an 'optimal mix' of activities that suits particular teachers at different stages in their individual development. Further, Day and Sachs (2004) argued that the prevailing 'deficit' model of CPD should be replaced by a model that recognises teachers' need to engage in continuous learning in school-wide learning communities. Such views from the research community appear to have been influential in CPD policy in England, particularly the notion of developing teacher professional learning communities or networks (Lieberman & Miller, 2008).

As part of the upsurge of interest in CPD for teachers, a whole raft of research on CPD, much of it emerging from the USA, has sought to identify principles or characteristics of 'effective' professional development. It has certainly been argued extensively that the traditional CPD model of sporadic one-day 'courses' for teachers, disconnected from previous professional learning, and delivered out of the school context, fails to have measurable impact on teachers' practices (Ball & Cohen, 1999; Day & Sachs, 2004; Elmore, 2002; Fishman et al., 2003; Garet et al., 2001; Loucks-Horsley et al., 2003; Stein et al., 1999). Moreover, as James et al. (2007, p. 63) in their recent research in the UK commented: 'continuous and progressive professional development will have more lasting value'. Lieberman & Miller (2008, p. 106) after



extensive research in the field in the USA, concluded that ‘Professional learning communities...hold the promise of transforming teaching and learning for both the educators and students in our schools’. The national PESS-CPD programme designers were keen to take cognisance of the international CPD research findings, and this explains some of the design features that they attempted to put in place (see section 3).

The research findings on CPD for physical education teachers (PE-CPD) have mirrored the wider CPD research. Just like their colleagues in other areas of the curriculum, PE teachers have long argued that professional development fails to meet their needs. For example, research by Armour and Yelling (2004a, 2004b, 2007) found that PE teachers’ CPD experiences were lacking coherence, relevance, challenge and progression. In addition, PE teachers in their research held strong beliefs about the value of learning collaboratively with and from professional colleagues, but were also aware that this form of informal, collaborative learning wasn’t viewed as ‘real’ CPD by their schools. On the other hand, when they attended an official CPD ‘course’ which required them to abandon their pupils for a day and which could be, ultimately, ineffective, they were often able to count this as CPD by recording evidence of attendance as sufficient evidence of learning (Armour & Yelling, 2007).

The findings from the English PE-CPD research were broadly similar to those from other studies around the world. Earlier studies, particularly those from the USA, had found that there was a lack of research on PE-CPD (Fejgin & Hanegby, 1999; Pissanos & Allison, 1996; Schempp, 1993; Stroot, Collier, O’Sullivan, & England, 1994; Ward & Doutis, 1999). More recently, research has pointed to the value of professional learning that is active, practical, situated, collaborative,

continuing/continuous, capacity-building, reflective, innovative, evolving and that results in teachers becoming autonomous learners (Armour, Makopoulou & Chambers, 2008; Ko, Wallhead & Ward 2006; Makopoulou & Armour, 2011 a; 2011 b; O'Sullivan & Deglau, 2006). There is also research that points to some successful PE-CPD initiatives, although in each case barriers to professional learning were also identified (e.g., Deglau & O'Sullivan, 2006; O'Sullivan, 2007; Patton & Griffin, 2008). For example, Keay (2006) encountered numerous challenges in trying to establish and sustain effective professional learning communities within physical education settings. Furthermore, just as in the wider CPD literature, there is an enduring concern about the quality of the evidence available on establishing links between teacher professional learning and pupil learning outcomes (Armour, 2006).

Teacher professional learning is complex in itself; attempting to make links between a teacher learning activity and specific pupil learning outcomes is more complex still (Timperley, 2008). Evidence from the broader CPD literature shows that significant progress has been made in this direction but much remains to be done as empirical findings are far from conclusive (Desimore, 2009; Garet et al., 2001). Indeed, Guskey and Yoon (2009) argued that 'at this time, we simply have no reliable, valid and scientifically defensible data' (p.498) to support claims made about effective and ineffective CPD strategies. They argue that planners and designers of professional development activities need to take a much earlier and greater interest in evaluation because, as they point out, time and funding for proper pilot studies are rarely available in the rush to 'implement' new professional development programmes.

The National PE-CPD Programme at the heart of this research was both ambitious and laudable in its aspirations, yet many of Guskey and Yoon's (2009)

comments apply and the process of engaging researchers was depressingly familiar. The evaluation was commissioned at a point where the design and structure of the programme were already established, with no opportunity or funding for effective pilot research prior to the first roll-out phase. Essentially, the process was as follows: a tender to run a national PE-CPD programme was published by Government. Consortia applied with their ideas for designing and running the programme (within very tight timeframes) and the programme had to be ‘rolled out’ as promised in the successful bid. It was anticipated that the evaluators would report on progress in all the aims of the programme (see below) although the broad scope of the aims made this improbable.

### **3. The National PESS-CPD Programme Explained**

The National PESS-CPD Programme was designed and managed by a consortium of national professional organisations in physical education and youth sport. It is important to note that this Programme formed part of an extensive government-funded strategy at the time to enhance the quantity and quality of physical education and sport available to children and young people, and to use PESS to deliver wider educational benefits to young people and to increase their physical activity levels.

The National PESS-CPD Programme was unique both in the history of PE-CPD specifically, and CPD more widely in England. The Programme’s overarching aims, as expressed in the tender (but with our emphasis), were certainly ambitious:

- Improving the quality of teaching and learning in PE and school sport in order to raise the attainment of all pupils (with ‘attainment’ being defined broadly);

- 230 • Increasing the understanding of the use of high quality PE and school sport in  
231 whole school improvement;
- 232 • Enhancing the links between high quality PE and school sport and the  
233 promotion of physical activity and health;
- 234 • Encouraging innovative interpretation of the National Curriculum for PE to  
235 ensure it closely meets pupils' needs and ensures their maximum achievement;
- 236 • Enhancing cross-phase continuity (between different stages of schooling) to  
237 ensure pupil progress

238 Although designed and managed centrally by the managing consortium, the  
239 National PESS-CPD Programme was delivered locally through a network of 150  
240 'Local Delivery Agencies' (LDAs). The Programme centred on a suite of stand-alone  
241 'modules' on a range of different topics. The modules were written by a range of  
242 existing CPD providers in physical education (commissioned by the managing  
243 consortium) and were then approved (or revised) by a government quango. Some of  
244 the modules were designed to be delivered face-to-face by a CPD provider, while  
245 others were designed as resource-based modules which teachers could access as  
246 required. Examples of module topics include: 'Learning in and through gymnastics  
247 /dance/ swimming / games activities'; 'Learning about health and healthy, active  
248 lifestyles'; and 'Assessing progress and attainment in PE'. The length of modules  
249 varied depending on the topic and the approach taken. Module delivery was monitored  
250 against agreed national quality assurance standards set by the managing consortium.

251 One of the innovative features of the Programme was that prior to engagement,  
252 schools and physical education departments were asked to undertake an 'audit of need'

to ensure the most appropriate modules were selected from the available menu. Teachers were also expected to undertake a pre-module task in order to familiarise themselves with the module topic and develop a clear understanding of their individual learning needs. In addition, post-module evaluation was required, including developing an individual action plan, recording evidence of change and disseminating learning to colleagues in a traditional ‘cascade’ model. It is also worth noting that although the original government tender specified that the new CPD programme should be innovative in order to deliver its ambitious aims, both the managing consortium and the local delivery agencies (LDAs) commissioned to deliver the CPD were largely drawn from existing professional development providers in physical education.

#### **4. The Evaluation Research Design**

Borko (2004) argued that in order to understand CPD in action, it is essential to consider all layers of the ‘system’ under investigation. This paper reports multi-layered data on the nature, quality and relevance of the new CPD opportunities/resources in delivering the programme aims. The decision was taken to place much of the evaluation resource into undertaking multi-layered case studies defined at either the ‘school’ or ‘LDA’ level. The rationale for this decision was that the research funding was spread over a number of years, and this provided an exciting opportunity for the researchers to track teacher learning as it evolved.

##### *4.1 Theoretical framework for the evaluation*

One of the first tasks for the researchers was to establish a theoretical framework for the evaluation. In the early stage of the process, therefore, the researchers analysed the theories of change (e.g. how and why a Programme is expected to ‘work’) driving the

277 Programme and the assumptions underpinning those theories (Anderson, 2004). An  
278 analysis of the Programme design and interviews with the managing consortia led to  
279 the development of a basic ‘Logic Model’ (see figure 1). It has been argued that a  
280 Logic Model provides evaluation researchers with a deceptively simple tool for  
281 mapping complex social programme initiatives (Kellogg Foundation, 2001) because it  
282 offers a diagrammatic overview of the ways in which a programme is intended, by the  
283 designers, to deliver its aims. Working through Logic Model development, and  
284 identifying implicit and explicit assumptions, also helps both programme designers  
285 and evaluators to identify some of the ‘grey areas’ and challenges that might lie  
286 ahead. By engaging in this process, effective data collection and analysis methods can  
287 be developed to assess a programme’s impact.

288       Logic Models, by their very name, imply a comforting degree of rationality and  
289 certainty. Yet, the process of creating such models in collaboration with evaluation  
290 funders is complex. Over time, as more data become available, Logic Models become  
291 increasingly detailed; it is interesting to note, however, that even in the first basic  
292 Logic Model developed by the evaluators, critical questions became apparent about a  
293 number of key assumptions that appeared to underpin the design of the programme.  
294 For example, the programme design appeared to be based on the key assumptions that  
295 improved teacher learning would lead directly to a wide range of enhanced pupil  
296 outcomes in and beyond physical education, that teachers and schools would be  
297 willing to engage in extensive self-evaluation, that schools would be able to fund the  
298 higher bills to pay for cover teachers, and that ‘cascade’ learning to professional  
299 colleagues would ‘work’. Interestingly, when presented with these assumptions at an  
300 early meeting, the managing consortium expressed concern about the realism of some  
301 of the outcomes. We return to some of these issues in the discussion.

Figure 1: NATIONAL PE AND SCHOOL SPORT PROFESSIONAL DEVELOPMENT PROGRAMME – BASIC LOGIC MODEL

YOUR PLANNED WORK ⇒ WHAT YOU INTEND TO DO		YOUR INTENDED RESULTS ⇒ WHAT YOU EXPECT TO HAPPEN		
RESOURCES/INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACT
i.e. positive or negative factors influencing your ability to do your work	i.e. what is done with the resources	i.e. the direct product of activities	i.e. changes in participants' due to Programme	i.e. changes in organisations, communities or systems due to the Programme
<p>Government funding</p> <p>Collaborating partners</p> <p>Others involved (Module/ resource authors, Local Delivery Agencies (LDA)</p> <p>Teacher replacement costs not covered</p>	<p>Modules designed by PE-CPD providers and approved by the National Consortium.</p> <p>Quality assurance (QA) consultant pack to be developed and distributed to all LDAs to (i) guide practice; (ii) ensure consistency; (iii) support tracking and moderation of CPD quality; and (iv) set out the QA process and allocate roles and responsibilities.</p> <p>LDAs to be developed and established within suggested timeframes, audit needs, recruit and offer on-going CPD to trainers and tutors; conduct observation visits to ensure quality in delivery (undertaken by lead trainers); encourage tutors to adopt innovative methodology in their delivery.</p> <p>Resource pack to all schools; Locally based workshops to be delivered based on needs so that individual staff access appropriate modules.</p> <p>Action plan to support implementation and online support to schools.</p> <p><u>Target:</u> 8500 primary / special and 1200 secondary schools.</p>	<p>Activities delivered to Primary, Special and Secondary schools – as monitored by the National Consortium for each LDA</p>	<p>1. Teachers improve practice to meet pupils' needs;</p> <p>2. Head teachers and subject leaders (PE coordinators and Heads of PE) better able to recognise and support high quality provision;</p> <p>3. Increased confidence and ability of staff to disseminate learning to colleagues;</p>	<p>1. Raising the attainment of all pupils;</p> <p>2. Contributing to whole school improvement;</p> <p>3. Promoting physical activity and health through high quality PEPS;</p> <p>4. Achieving maximum pupil achievement through innovative interpretation of the NCPE;</p> <p>5. Enhancing cross-phase continuity to ensure pupil progress</p>

#### 4.2 Selecting case studies and designing case study protocols

Between January 2004 and March 2006, a total of 15 case studies were undertaken. Case studies were based in geographical regions of England, and included both school participants in the Programme and LDA providers. The selected regions were not intended to be nationally representative, instead an attempt was made to reflect different features of the very broad population targeted by the National

314 Programme (all schools) and to seek 'opportunities to learn' (Stake, 2005, p. 451).  
 315 Thus, a database on participating local government authorities was created including  
 316 information on location, types of school, pupil attainment, number of special  
 317 educational needs pupils, levels of ethnicity and levels of deprivation. Two researchers  
 318 analysed the database independently and identified local authorities from which LDAs  
 319 and their schools would be selected. The final selection covered all regions of the  
 320 country and a range of local authority profiles (inner city, rural, affluent, deprived,  
 321 etc.).

322         Within this regional structure, nine of the case studies undertaken were in-depth  
 323 'school' case studies that sought to understand how the PE-CPD Programme operated  
 324 for teachers at the school level. The researchers wanted to find out how modules were  
 325 selected by schools and teachers, whether and how the 'audit of needs' was undertaken  
 326 and how effective it was; how teachers experienced the CPD modules they selected  
 327 and what they learnt from it; and how they sought to cascade learning to peers and  
 328 change their own practice over time. In addition, six case studies were undertaken at  
 329 the LDA level. As was noted earlier, LDAs had to deliver CPD within the national  
 330 framework, but had some flexibility in order to meet specific local needs. In these case  
 331 studies, the researchers sought to understand how the LDA providers interpreted and  
 332 delivered the programme and why (See appendix I for further detail on the selected  
 333 schools and LDAs). The case study protocols were approved by a University ethical  
 334 committee, and all participants completed consent forms and were guaranteed  
 335 anonymity in the research reports. Anonymity was particularly important in the case of  
 336 LDAs who, having won the contracts to 'deliver' the programme for their local areas,  
 337 were under considerable pressure to adhere to agreed timescales and to demonstrate  
 338 impact.



The data reported from the nine school case studies were gathered from semi-structured interviews with participating teachers and head teachers (see Appendix II for full interview protocols). In developing the interview protocols, Guskey's (2002) multi-level model was used as a framework to structure in-depth questions about teachers' reactions to CPD participation, changes in teachers' knowledge and practices, pupils' learning (as perceived by the teachers), and any evidence of whole school improvement linked to Programme participation. The case-study protocols were designed to ensure that all the interview schedules were centred on the National PESS-CPD Programme aims, but that the questions were open enough to allow for the participants to raise additional or different issues and concerns. The researchers conducted a total of 20 in-depth, semi-structured interviews with six primary teachers, six head teachers (primary and special schools), four PE specialist teachers (secondary schools), two teachers working in special schools, and two teaching assistants.

A total of six LDA-level case studies were also undertaken. LDAs were required to develop a common structure with specific, named roles comprising of an overall manager, lead trainers and local tutors. Lead trainers were responsible for delivering programme-specific training to the local tutors who were then responsible for much of the delivery to teachers. In the LDA case studies, interviews were undertaken with each of the lead managers, three lead trainers and four local tutors. In line with the Logic Model theoretical framework for this evaluation, in each of the first visits to LDAs, the interviewer explored the assumptions and rationale underpinning the ways in which individual LDAs had decided to organise the national programme in their local area.

#### *4.3 Data analysis*

This was an evaluation study, so it was important to analyse the data around the programme aims and in the context of the Logic Models developed both for the national programme and for each case study. Thus, the programme aims provided a framework for the evaluation, and the Logic Models reflected these (see, for example, figure 1). In addition, the use of semi-structured interview schedules ensured that both teachers and CPD providers were able to focus on the issues that were important to them. This offered the potential to extend and deepen the findings beyond merely reporting on each of the programme aims.

Given the qualitative, case study methods used in the evaluation and the overarching framework of the programme aims, it was appropriate to seek to analyse the data taking a dual approach. Thus the data were trawled for findings that specifically related to the programme aims, but were also analysed using a constructivist revision of the Grounded Theory Method (GTM) (Charmaz, 2006) and it is this analysis that is reported in this paper. Data were transcribed and read, leading to a process of progressive coding as advocated by Charmaz. In this process, two researchers reviewed the data and coded to ensure that participants' experiences (positive and negative) of delivering or seeking to learn from the programme were captured. The analysis resulted in four 'themes': 'tailoring provision', 'active and interactive professional learning', 'collective participation', and 'sustained engagement in professional learning?' (see figure 2 for an example of the process leading to two of the themes). The data were then reported both in detailed 'vertical' case reports on single schools and LDAs, and in cross-case thematic analysis. A constructivist version of GTM was considered appropriate given the conceptual framework that was already imposed upon the data by the CPD programme aims. Hence, Charmaz's criterion of 'resonance' was also important as the researchers sought to ensure that the process of

focussed coding linked with the programme aims, but also ensured that the participants' broader experiences of learning in the programme were prominent in the findings.

Figure 2: *Illustration of the coding process from codes to categories and finally 'themes' (1 and 3).*

Theme	Categories	Codes
1. Tailoring provision	a. audit needs	a. reviewing audit practices, working with PDMs, establishing communication links with schools, informal and ongoing interactions with schools, local knowledge.
	b. addressing teachers' priorities	b. adjust / adapt modules, offer more practical experiences, being 'creative' with module content, clarify and address teachers' learning needs and expectations, focus on pupil learning.
3. Collective participation	a. benefits of collective participation	a. sharing language, peer support during implementation, potential for sustained impact, benefits of two or more teachers from the same school working together.
	b. challenges of sharing learning	b. challenges of cascading knowledge, lack of time, lack of opportunity, lack of expertise.

In the next part of the paper, data are reported in two main sections. In section 5.1, data from the first three themes are reported (tailoring provision, active and interactive professional learning, and collective participation) to highlight some of the key successes of the programme design, and the issues that arose as the Programme evolved. In section 5.2, negative findings from theme four (sustained engagement in professional learning?) are reported illustrating the problems teachers encountered in developing and sustaining their learning. Throughout the next section, data extracts from interviews are identified by case study type (school or LDA) and number; and respondent (i.e. teacher).

403 5.1 Key Successes

404 Findings

405 *(i) Tailoring provision: auditing to meet local needs*

406 The data from the case studies at both the school and CPD level point to clear evidence  
 407 that, from the perspective of teachers, head teachers and CPD providers, the National  
 408 PESS-CPD Programme was a success in many respects. Attendance at Programme  
 409 modules was rated as a positive learning experience by the majority of teachers in  
 410 school case studies. Both teachers and CPD providers appreciated the efforts made to  
 411 tailor the modules to meet teachers' and schools' needs. As one CPD provider argued:

412 We are not delivering things that people do not want, we are  
 413 delivering what people are asking for and I think that has been a real  
 414 boon. (LDA case study 1, local tutor)

415 From the teachers' perspectives, it was clear that attending the 'right course' for them  
 416 was paramount. Data showed that, in the majority of the school cases studies, teachers  
 417 and head teachers believed that CPD providers had established effective  
 418 communication links with schools and, as a result, their needs were met:

419 The last thing I want to do is to go to a course that has no  
 420 relevance, no bearing to what I'm doing and where I'm teaching.  
 421 So, it was really very thoroughly audited of what we [the PE  
 422 department] wanted. (School case study 2, secondary PE teacher)

423 On the other hand, the audit process was time consuming and, as the programme  
 424 evolved, CPD providers found it increasingly difficult to maintain their early audit  
 425 activities. Initially, for example, the CPD providers administered letters (including the

aims of the Programme, the modules on offer and an audit form to be returned) to all schools in order to identify which of the menu of available modules was likely to be popular. As the Programme evolved, however, the providers relied increasingly on existing information from other sources. However, once teachers were attending a module, the providers enhanced the needs-analysis process by encouraging teachers to explore the reasons for their participation in the module, identify their own learning objectives and think in terms of what they wanted to achieve for their pupils. As one provider explained:

It is useful to focus teachers on what they are doing with their specific class or with a particular pupil or group of pupils. In this respect, CPD delivery is more focused and there is teacher learning involved. (LDA case study 3, lead trainer)

As a result of strategies such as these, the vast majority of school case study participants interviewed reported that CPD providers 'absolutely listened to us' (school case study 4, head teacher) and created opportunities for them to address their local priorities. Echoing the views of many research participants, one teacher articulated clearly the way in which the 'localised' nature of the Programme implementation was a key feature of its effectiveness:

These people (CPD providers) know the school, the pupils, know the difficulties of what it means to teach in these schools, with these pupils, in this area. So it makes it a lot more personal and you can come back and actually implement something. (School case study 2, secondary PE teacher)

449 CPD providers were certainly confident (based on little robust evidence) that  
450 they were delivering what was required to meet the Programme aims:

451 I think as trainers we've all tried to make them [the modules] as  
452 practical as possible as well as addressing the national criteria that we  
453 have to deliver to, so yes I think it [the programme] is beginning to  
454 help raise standards. (LDA case study 6, lead trainer)

455 *(ii) Active and interactive learning approaches*

456 Teachers welcomed the opportunities offered in the Programme for active participation  
457 in the learning process and for sharing ideas, knowledge and experiences with  
458 professional colleagues. In this way, as one primary school teacher explained it:  
459 'teachers themselves generate ideas rather than 'just being fed'' (school case study 3).  
460 This principle underpinned much of the provision in the national programme:

461 I try and involve people, it is not me who is the expert going 'this  
462 is how you are going to do it'. It is a sort of sharing situation.  
463 (LDA case study 5, CPD manager)

464 In addition, opportunities for interacting with colleagues were considered to be a  
465 crucial design feature supporting teachers' learning. The assumption that underpinned  
466 most CPD providers' work was that teachers with different levels of understanding and  
467 varied experiences should share their views in order to learn from each other. It was  
468 clear that CPD providers used this approach as a deliberate learning strategy. For  
469 example, one CPD provider stated that she had the aim to 'bring [together] all  
470 teachers' expertise within the CPD module' (LDA case study 1, CPD manager) in  
471 order to enhance and deepen understandings. Another provider commented:

472 Teacher learning was interactive...teachers talked ....got into  
 473 small groups and discussed it, exchanged ideas, asked one another  
 474 their point of view. That has been an important approach. (LDA  
 475 case study 2, local tutor)

476 This approach was viewed as one of the most effective features of module delivery by  
 477 participants:

478 I think we did take a lot of ideas from the group, from other  
 479 people, from other schools that have actually already put some of  
 480 the ideas in practice. It was good to use some of their ideas.  
 481 (School case study 7, teaching assistant)

482

483 During the discussion, I could pick up things that other people  
 484 were saying, I could agree or disagree. As a learner, I got very  
 485 involved in the process and I learned a lot. (School case study 1,  
 486 primary teacher)

487 It was evident that the CPD providers had accepted the suggestions made in the  
 488 Programme training about active learning as a core feature of effective teacher  
 489 learning. Certainly there was evidence in all the case studies of teachers being engaged  
 490 as active, collaborative learners.

491 (iii) *'Collective participation'*

492 At the beginning of the Programme, CPD providers tended to design module delivery  
 493 around 'traditional', one-day activities. Delivery dates were pre-determined and  
 494 individual teachers from different schools were invited to go to a single location in

order to participate. However, during the second year of the programme (2005-2006), CPD providers became increasingly aware of the limitations of this approach and schools were invited to choose between whole-school/department training days or 'traditional' out-of-school one-day courses.

The teachers reported valuing both forms of provision for different reasons. In the traditional out-of-school courses, as previously reported, teachers valued interacting and learning from colleagues from different schools with different experiences and programmes. In addition, teachers from three schools (school case studies 1, 5 and 7) drew attention to the learning potential where two or more teachers from the same school attended a module together. Further to this, whole-school or whole-departmental training was also highly valued (school case studies 2, 3, 4 and 8). Data clearly showed that this 'collective CPD participation' (Garet et al., 2001) led to some very positive learning experiences as teachers developed a shared language and collective frameworks of understanding that they could then use in practice and develop further with their colleagues. As one secondary school PE teacher explained: 'I believe that this is a very positive aspect of the module, for our understanding, that we worked together as a department' (school case study 2).

Particularly notable was the finding that collective participation in modules could form the foundation of subsequent team work and peer support during the challenging post-module implementation phase. In these instances, there was evidence of sustained learning activity. In two secondary schools, where all members of the PE department acknowledged the importance of a specific topic and whole-department training days were offered, teachers reported that the issues explored during those days were still part of the department's discussions a year later, influencing their practices in fundamental ways:



520 Every week we meet and we look at practical bits for PE and  
 521 sport, how to encourage more pupils to get involved and all this  
 522 came from this module.... The opportunity to share stuff during  
 523 the module has been so vital that we have continued to do it.  
 524 (School case study 2, secondary PE teacher)

525  
 526 Sharing ideas resulted in positive outcomes for the quality of our  
 527 work and interactions within the department. (School case study  
 528 8, secondary PE teacher)

529  
 530 In another example, in one primary school (school case study 1) two teachers who  
 531 were involved in the same physical activity/health module reported supporting each  
 532 other to 'make things happen' upon their return to their school:

533 Schools are so busy, but in this case we had actually time with Tom  
 534 [colleague] to think of some things and come back to school and  
 535 actually do some of these things. And that has been great.

536 In this school, 12 months after module participation, both teachers reported that they  
 537 were still 'brainstorming' in order to explore effective ways to engage pupils in  
 538 physical activity. Importantly, however, although their collective participation enabled  
 539 them to develop a common strategy, these teachers still struggled to 'present something  
 540 strong about our plans' to other teachers in their schools. Despite the head teacher's  
 541 support for the physical activity initiatives they were trying to introduce, most  
 542 interactions with colleagues were too informal and rushed to lead to effective learning.

Furthermore, one of the participants commented that 'not all teachers share the same passion about healthy, active lifestyles, that is why they did not choose that module....and it is hard for us sometimes'. This example illustrates some of the common problems found with cascading CPD knowledge even in the most promising of circumstances. Certainly for the majority of teachers who participated in modules as the sole representative of their schools, it was challenging enough for them to develop and grow their newly acquired knowledge in practice, let alone to 'cascade' their new knowledge to colleagues.

## 5.2. Sustained engagement in professional learning

In addition, to the clear strengths of the programme, there were also some fundamental difficulties and many of these were unanticipated by the Programme designers. For example, it became apparent from the case study data that one of the strengths of the national Programme was breadth of provision; i.e. it made available to teachers a wide range of modules on different topics. As a result, most teachers were able to select modules in areas of interest to them. However, data showed that breadth was also a key weakness of the Programme, and that the broad nature of provision prevented teachers from developing their new areas of interest – i.e. depth in learning - either by taking further modules on the same topic or through further supported learning in their school context. Although CPD providers acknowledged the importance of 'follow-up' support, there was no evidence to suggest that they had found workable (and affordable) ways to achieve this in practice. As a consequence, the degree to which teachers continued to learn after the end of module participation seemed to be an individual (and school) matter.

566           The majority of the teachers interviewed expressed a clear interest in expanding  
567   and extending their knowledge on a specific topic and, in this respect, the national  
568   Programme failed to live up to their expectations. For example, one secondary school  
569   PE teacher argued that, despite gaining interesting insights in a whole-department  
570   training activity, and continuing to discuss the content during department meetings (as  
571   reported above re school case study 2) they also felt frustrated in their efforts to learn  
572   because 'more support, more information about how we can move it on' was required.  
573   Similarly, a primary teacher reported that:

574           [Although] the content was interesting and stimulating....I would  
575           like to attend another module to further study health and body  
576           issues. It might sounds similar, but, for me, it would be a step  
577           forward. (School case study 1)

578   Another primary teacher commented eloquently on the importance of external  
579   expertise in facilitating and challenging teachers to progress in their learning:

580           I would like to construct the knowledge. I would like to start to  
581           lead it and see where it goes. But it needs to have some sort of  
582           guidance. (School case study 5)

583   Some teachers suggested the national Programme should have a different structure,  
584   with the addition of follow-up support meetings, led by CPD providers and other  
585   experts, as a strategy to increase and deepen their understandings:

586           I believe that if a course lets you go back to your school and try  
587           things, record the impact or keep notes for a,b,c and then go  
588           back again and talk about it more....that would make me not

589 forget. I could remember the whole module if it was structured  
590 in this way. (School case study 1, primary teacher)

591

592 I came out with lots of ideas, which need time to be  
593 implemented and then, maybe it would be useful to go back and  
594 say 'I have done this, maybe we could now move on'. (School  
595 case study 8, secondary PE teacher)

596 There were two examples in the case studies where the CPD provider attempted to  
597 offer follow-up sessions/modules. In the first, the PE department attended a follow-up  
598 session, with the aim to support teachers to 'go away with the new knowledge and  
599 come back and give feedback about how they worked' (school case study 2, secondary  
600 PE teacher). Yet, teachers felt this meeting was not planned in a way that could deepen  
601 their understanding of the topic, instead they tended to cover the same material again.  
602 In the second example, a CPD provider took the initiative to design and offer a follow-  
603 up module in one topic. However, secondary PE teachers reported that they were  
604 disappointed with the content:

605 I was disappointed with the second module because it was not  
606 related to what we had in the first time, but, having said that, the  
607 second module was probably more practical, which was what we  
608 wanted. ....But, there was such a wide range of people in the course  
609 and this module did absolutely nothing to people who have been  
610 teaching and coaching for years, so it failed to address everybody's  
611 needs. (School case study 8)

612 In both cases, the data seemed to suggest that although there was strong teacher interest  
 613 in increasing depth of learning in areas of interest, and there was some willingness on  
 614 the part of CPD providers, there was a lack of expertise on how such progression might  
 615 be facilitated or, indeed, on what it should look like. One CPD provider commented  
 616 that the national modules were too repetitive to motivate teachers to engage in long-  
 617 term, sustained, and progressive professional learning. As he put it:

618           One of our biggest challenges here is to lock people into longitudinal  
 619           training and obviously having modules with a lot of repetition was not  
 620           going to be helpful to us long term. (LDA case study 3, lead trainer)

621 The issue of depth of learning is an interesting one because it suggests there was a  
 622 belief amongst the Programme designers that the way to deliver the Programme aims  
 623 was to offer teachers access to a set of relatively short modules on different topics  
 624 within physical education. From this viewpoint, it is interesting to consider the  
 625 different ways in which the teachers were conceptualised as learners in the Programme  
 626 design, particularly in a changing national context where professional development is  
 627 to become almost wholly school managed and led.

## 628 **6. Discussion**

629 The task of the researchers was to find out whether the structures and opportunities  
 630 provided through the new national PESS-CPD Programme met teachers' needs, and to  
 631 what extent the ambitious Programme aims were achieved. Data on themes 1-3, as  
 632 reported above, illustrate numerous ways in which the Programme was received  
 633 positively by teachers and schools. In particular, where it operated well, the tailoring of  
 634 module provision through the audit process was regarded as helpful, resulting in  
 635 module selection and delivery in areas of teacher interest. Although it is important to

remember that the menu of modules made available was pre-determined by the managing consortium, in some respects it can be argued that the Programme met key aspects of Day and Townsend's (2009) four principles of effective professional development: voluntarism, choice, agency and ownership, and control. To this extent, the National PESS-CPD Programme can be regarded as a success and other national CPD initiatives could learn something from it.

Teacher learning initiatives in physical education and school sport (PESS) tend to get rather less press within the general education literature than those in subjects such as maths and science. It is worth highlighting, therefore, that as a direct result of this Programme, a new national infrastructure of CPD providers was established and a suite of partially standardised modules was made available to all teachers (and other adults) engaged in teaching PESS across England. Furthermore, the principle of establishing a national Programme that could be adapted - to some extent - to meet local needs was upheld, there was evidence of increasing local flexibility as the Programme evolved, and teachers were positive about many aspects of provision. It seems clear, therefore, that in these respects at least, the Programme is an example of successful implementation.

It could be argued, however, that the successes of the Programme also exposed some weaknesses and these can be explained, partially, by an analysis of the learning theories, or perhaps the 'folk theories' of learning (Bereiter, 2002) underpinning the Programme design. Some of these theories were revealed in the initial Logic Model created in the early stages of the evaluation with the managing consortium, while others became apparent as the Programme evolved. The key issue is that although the Programme aims were very ambitious, expressing great expectations for teacher learning, pupil learning and whole

661 school improvement, and an attempt was made to ground the Programme in an  
 662 understanding of teachers as learners, the model of teacher learning that emerged  
 663 through the programme activities was, at times, both contradictory and limiting.

664 We would argue that one of the main flaws in this, as in other CPD  
 665 programmes, was its fractured understanding of teachers as learners. Falk (2001,  
 666 p. 137) claimed that 'professional learning is *the* job of teaching' and Armour  
 667 (2010) among others, has suggested that teachers could benefit from considering  
 668 themselves as, primarily, learners rather than as teachers. These views seem to  
 669 resonate with Hodkinson, Biesta and James (2008) and Hager and Hodkinson  
 670 (2009) who theorise learning as a holistic process of 'becoming':

671 this entails understanding learning as social and embodied...thus when a  
 672 learner constructs or reconstructs knowledge or skills, they are also  
 673 reconstructing themselves...That is, people become through learning and learn  
 674 through becoming whether they wish to do so or not, and whether they are  
 675 aware of the process or not. (p.633)

676 Central to this view is the understanding that learners do not 'become' to a fixed  
 677 endpoint and that 'learning is never complete' (ibid). This sits well with Dewey's  
 678 (1958) argument about the centrality of experience in learning, and about the quality of  
 679 learning experiences; i.e. if teachers are engaged in impoverished learning experiences  
 680 over a long period of time they are likely to become deskilled as learners. Claxton's  
 681 (2007) arguments about building learning capacity are similar, because each CPD  
 682 experience should build learning capacity for the next, resulting in learners who  
 683 'become different and move beyond where they are' (Greene, 1995, p. 13). These

684 views explain why CPD Programmes that are built around “disconnected topics”  
685 (Elmore, 2002, p. 10) are likely to result in limited learning (Ball & Cohen, 1999).

686         In the National PESS-CPD programme, the case studies offer clear evidence of  
687 limits to learning progression as the teachers sought to develop their emerging  
688 interests. It would appear, therefore, that the Programme was built around a learning  
689 model whereby it was anticipated that teachers would *learn* (something specific) and  
690 then *teach* or *implement* what was learnt. In a sense, therefore, while it was recognised  
691 by the Programme designers that further learning *support* was desirable (in the original  
692 Programme design it was anticipated that e-learning communities would develop) to  
693 ensure teachers could ‘implement’ their learning in practice, the designers did not  
694 anticipate that teachers would also ‘become’ increasingly interested *learners* in the  
695 module topics. Hence, teachers were enthused by the learning approach taken in the  
696 modules, especially the pre-module audit and the active learning approach, but then  
697 frustrated as they sought to deepen their learning in areas of interest. It could be  
698 argued, therefore, that although strenuous attempts were made to develop teachers as  
699 active and collaborative *learners* in the CPD modules, the underpinning theory was  
700 contradictory in that there was an implicit assumption that they would revert to being  
701 *teachers* who *delivered* learning to pupils (or *cascaded* it to colleagues) once they  
702 returned to the school setting. Moreover, in the changing policy context in the UK,  
703 where schools will be increasingly expected to lead all professional development for  
704 teachers, this conceptualisation of teachers as teachers - rather than primarily as *lead*  
705 *learners* - will become increasingly inadequate.



Pedder, James and Macbeath (2005, p.237) argued that where schools are expected to take responsibility for teachers' professional development, a number of factors need to be in place:

Classrooms need to become crucibles of learning for teachers as much as for their students. In order to develop classrooms in this way, teachers, their pupils and their schools, together with local and central government need to accept responsibility for developing and restructuring teaching and learning roles and relationships within them.

In their research on teacher professional learning in and out of the school workplace, these authors found that schools were 'highly conducive to teachers' learning out of the classroom but rather less amenable to teachers learning with colleagues in the classroom' (ibid, p. 236). Nonetheless, these researchers concluded that despite its challenges, learning with colleagues as part of their day-to-day teaching activities is 'indispensable' in the quest to raise the quality of educational provision. These views are similar to that of Timperley (2008) who argued that professional development programmes are likely to have limited impact on teacher and pupil learning where they are incongruent with the specific contexts of practice. Certainly, the new PESS-CPD Programme attempted to locate a nationally determined set of modules in the contexts of schools, but it also failed to support teachers who were stimulated by the Programme to develop as learners.

Looking back on the national PESS-CPD programme, therefore, it could be argued that what was needed was the view of learning proposed by Hager and Hodkinson (2009, p. 635) as one of 'becoming within a transitional process of boundary crossing'. Wayne, Suk Yoon et al. (2008) suggest there is still very little

CPD available that supports teachers to be active, lifelong learners and as James, McCormick, et al. (2007, p.63) have noted, 'continuous and progressive professional development' is likely to be most effective for teachers. It is also clear that teachers will find it difficult to engage pupils as lifelong learners if they, themselves, are not similarly engaged. Darling-Hammond and Richardson (2009) conclude their overview of research on professional development as follows:

When schools support teachers with well-designed and rich professional development, those teachers are able to create the same types of rigorous and engaging opportunities for students – a foundation for student success in school and beyond. (p. 52)

What this means is that in order to achieve its expectations for pupil learning and whole school improvement, the National PESS-CPD Programme should have been founded on an understanding of teachers as continuous, lifelong learners. As such, it might be argued that the Programme design would have looked rather different, possibly offering longitudinal modules that could support teachers, as learners, to continue to pursue their evolving interests. Certainly these findings suggest that in a new era of CPD for teachers in the UK, where schools are being encouraged to take the lead in the CPD requirements of their staff, an opportunity exists for teachers to develop areas of interest in ways that the national programme appears to have inhibited. On the other hand, as Pedder, James and Macbeath (2005) found, schools may find it challenging to access the expertise they need to support progressive teacher learning.

At its core, most professional development policy and practice reflects core societal beliefs about the nature of teachers, and teaching as a profession. In this

respect, teaching is a somewhat curious profession in that its primary clients are children and young people. Whereas most other recognised professions have youth branches or specialities within a wider professional body, teaching is focussed exclusively on its young clients. This might partially explain why, as was noted earlier, teaching has struggled at times, to gain full recognition in comparison to some of the more established professions such as medicine or law (Hargreaves, Cunningham et al., 2007). This relatively low status might also explain why, in this programme, members of the physical education profession (broadly conceived) agreed to even attempt to deliver the largely unrealistic aims of the programme solely through a menu of CPD modules. A more confident professional group might have challenged such aims.

## **7. Conclusion**

This paper has reported data from the evaluation of an innovative national CPD programme for teachers in England. The programme was designed to take account of some of the existing research on teachers' professional learning, and key design features included a pre-module audit of learning needs for teachers and schools, and an active and collaborative approach to learning within modules. 'Collective participation' (Garet et al., 2001) was also highly valued by teachers. It was recognised that sustained learning support would be beneficial for teachers' learning post-module engagement, but this proved impossible to deliver in practice. The programme was regarded as successful and interesting by participants in this research, and it clearly generated some enthusiasm for learning, although it failed to support teachers to extend their learning in areas of interest.

Jarvis (2009, p. 32) has argued that most theories of learning lack credibility because they are based on 'an incomplete theory of the person' and Hager and

Hodkinson (2009, p. 620) have claimed that 'learning is more fruitfully viewed as an ongoing process rather than a series of acquisition events'. Both these views are illustrated in the CPD programme analysed in this paper. The evaluation findings suggest, therefore, that the theory of learning employed in the Programme was both incomplete and inconsistent, and that although teachers were offered a broad range of interesting learning activities, they were unable to grow this learning in practice. This suggests that if schools are to take an increasing lead in professional development, as advocated by the UK government and supported by much CPD research, further consideration will be needed about the ways in which teachers are conceptualised as lead professional learners in the school setting. Certainly the research reported here supports the notion that all parties can benefit (researchers, programme designers and users) from engaging in an early collaborative analytical process to explore implicit and explicit learning theories underpinning CPD programmes, and (importantly) their consequences. This conceptual development phase could offer one way of ensuring that Guskey and Yoon's (2009) vision of CPD as 'an inquiry-based profession' becomes a reality.

**Word count of main text: 8981 (reduced from 9866)**

## **References**

Anderson, A. A. (2004) Theory of change as a tool for strategic planning, Available online at

[http://www.aspeninstitute.org/sites/default/files/content/docs/roundtable%20on%20community%20change/TOC\\_2004.PDF](http://www.aspeninstitute.org/sites/default/files/content/docs/roundtable%20on%20community%20change/TOC_2004.PDF)

- 801            Armour, K.M. (2006) Physical Education Teachers as Career-Long Learners: A  
802    Compelling Agenda, *Physical Education and Sport Pedagogy*, 11 (3), 203-207.
- 803            Armour, K.M. (2010) The physical education profession and its professional  
804    responsibility...or...why '12 weeks paid holiday' will never be enough, *Physical*  
805    *Education & Sport Pedagogy*, 15(1), 1-14.
- 806            Armour, K.M. & Yelling, M. R. (2004a) Continuing Professional Development  
807    for Experienced Physical Education Teachers: Towards Effective Provision, *Sport,*  
808    *Education and Society*, 9 (1), 95-114.
- 809            Armour, K.M. & Yelling, M.R. (2004b) Professional development and  
810    professional learning: bridging the gap for experienced physical education teachers.  
811    *European Physical Education Review*, 10 (1), 71-94.
- 812            Armour, K.M. & Yelling, M. R. (2007) Effective Professional Development for  
813    Physical Education Teachers: The Role of Informal, Collaborative Learning, *Journal*  
814    *of Teaching in Physical Education*, 26 (2), 177- 200.
- 815            Armour, K.M., Makopoulou, K. & Chambers, F. (2008) Progression in PE  
816    teachers' career-        long professional learning: practical and conceptual concerns,  
817    *Paper presented at the American Educational Research Association Annual Meeting*,  
818    March 2008, New York.
- 819            August, K., Brooks, R. Gilbert, C., Hancock, D., Hargreaves, D., Pearce, N.,  
820    Roberts, J., Rose, J. & Wise, D. (2006) *2020 Vision: Report of the Teaching and*  
821    *Learning in 2020 Review Group* (DfES publications).
- 822            Ball, D.L. & Cohen, D.K. (1999) Developing practice, developing  
823    practitioners: Towards a practice-based theory of professional education, in: G.Sykes

- 824 & L. Darling-Hammond (Eds) *Teaching as the Learning Profession: Handbook of*  
 825 *Policy and Practice* (3-32) (San Francisco, Jossey Bass).
- 826 Bereiter, C. (2002) *Education and the Mind in the Knowledge Age* (Mahwah,  
 827 NJ/London, Lawrence Erlbaum).
- 828 Borko, H. (2004) Professional Development and Teacher Learning: Mapping  
 829 the Terrain, *Educational Researcher*, 33 (8), 3-15.
- 830 Bradley, H. (1991) *Staff Development* (London, Falmer Press).
- 831 Browne, J. D. (1979) *Teachers of Teachers: A History of the Association of*  
 832 *Teachers in Colleges and Departments of Education* (London, Hodder and  
 833 Stoughton).
- 834 Brunetti, G. J. (1998) Teacher education: A look at its future, *Teacher*  
 835 *Education Quarterly*, Fall, 59-64.
- 836 Charmaz, K. (2006) *Constructing Grounded Theory: A Practical Guide*  
 837 *Through Qualitative Analysis* (London, Sage Publications).
- 838 Claxton, G. (2007) Expanding young people's capacity to learn, *British Journal*  
 839 *of Educational Studies*, 55 (2), 115-134.
- 840 Darling Hammond, L. & Richardson, N. (2009) Teacher Learning, *Educational*  
 841 *Leadership*, February, 46-53.
- 842 Day, C. (2002) The challenge to be the best: reckless curiosity and mischievous  
 843 motivation, *Teachers and Teaching: Theory and Practice*, 8 (3/4), 421-434.
- 844 Day, C. & Sachs, J. (2004) Professionalism, performativity and empowerment:  
 845 discourses in the politics, policies and purposes of continuing professional

846 development, in: C. Day & Judyth Sachs (Eds) *International Handbook on the*  
 847 *Continuing Professional Development of Teachers* (Milton Keynes, Open University  
 848 Press), 3-32.

849 Day, C. and Townsend, C. (2009) Practitioner action research: building and  
 850 sustaining success through networked learning communities, pp. 178-189 in Susan E.  
 851 Noffke & Bridget Somekh (eds.) *Handbook of Educational Action Research*, London:  
 852 Sage.

853 Deglau, D. & O'Sullivan, M. (2006) The effects of a long-term professional  
 854 development programme on the beliefs and practices of experienced teachers, *Journal*  
 855 *of Teaching in Physical Education*, 25, 379- 396.

856 Department for Education and Employment – DfEE (2001) *Learning and*  
 857 *teaching. A strategy for professional development* (Nottingham, DfEE  
 858 Publications).

859 Desimone, L.M. (2009) Improving Impact Studies of Teachers' Professional  
 860 Development: Toward Better Conceptualisations and Measures, *Educational*  
 861 *Researcher*, 38 (3), 181-199.

862 Dewey, J. (1958) *Experience and Education* (New York, Touchstone).

863 Elmore, F.R. (2002) *Bridging the Gap Between Standards and Achievement:*  
 864 *The Imperative for Professional Development in Education* (New York, Albert  
 865 Shanker Institute).

866 European Commission (2008) *European Qualifications Framework for*  
 867 *Lifelong Learning* (Luxembourg, Office for Official Publications of the European  
 868 Communities).

- 869 Falk, B. (2001) Professional Learning through assessment., in: A. Lieberman  
870 and L. Miller (Eds), *Teachers Caught in the Action. Professional Development that*  
871 *Matters* (118-140) (New York, Teachers College Press).
- 872 Fejgin, N. & Hanegby, R. (1999) School based in-service training of PE  
873 teachers, *European Journal of Physical Education*, 4(1), 4-16.
- 874 Fishman, B.J., Marx, R.W., Best, S. & Tal, R.T. (2003) Linking Teacher and  
875 Student Learning to Improve Professional Development in Systemic Reform, *Teaching*  
876 *and Teacher Education*, 19, 643-658.
- 877 Garet, M.S., Porter, A.C., Desimone, L., Birman, B.F. & Yoon, K.S. (2001)  
878 What Makes Professional Development Effective? Results From a National Sample of  
879 Teachers, *American Educational Research Journal*, 38 (4), 915-945.
- 880 General Teaching Council (2000) *Continuing Professional Development:*  
881 *Advice to Government*, December (London, The General Teaching Council for  
882 England).
- 883 General Teaching Council (2007) *A Personalised Approach to Continuing*  
884 *Professional Development* (London, The General Teaching Council for England).
- 885 Greene, M. (1995) *Releasing the Imagination* (San Francisco: Jossey Bass).
- 886 Guskey, T. R. (1994) Results-Oriented Professional Development: In Search of  
887 an Optimal Mix of Effective Practices, *Journal of Staff Development*, 15, 42-50.
- 888 Guskey, T. R. (2002) Professional development and teacher change. *Teachers*  
889 *and Teaching: Theory and Practice*, 8 (3/4), 381-391.



- 890 Guskey, T.R. & Yoon, K.S. (2009) What works in professional development,  
891 *Phi Delta Kappan*, March, 495-501.
- 892 Hager, P. & Hodkinson, P. (2009) Moving beyond the metaphor of transfer of  
893 learning, *British Educational Research Journal*, 34 (4) 619-638.
- 894 Hargreaves, L; Cunningham, M.; Hansen, A.; McIntyre, D.; Oliver, C; & Pell,  
895 T. (2007). *The Status of Teachers and the Teaching Profession in England: Views*  
896 *from Inside and Outside the Profession*. Final Report of the Teacher Status Project,  
897 DfES – Research Report RR831A.
- 898 Helsby, G., Knight, P., McCulloch, G., Saunders, M., & Warburton, T. (1997)  
899 *'Professionalism in Crisis', A Report to Participants on the Professional Cultures of*  
900 *Teachers Research Project*. Lancaster: Lancaster University.
- 901 Hodkinson, P., Biesta, G., & James, D. (2008) Understanding learning  
902 culturally: Overcoming the dualism between social and individual views of learning,  
903 *Vocations and Learning*, 1, 27-47.
- 904 James, M., McCormick, R., Black, P. (et al). (2007) *Improving Learning How*  
905 *To Learn: Classrooms, Schools And Networks* (London, Routledge).
- 906 Jarvis, P. (2009) Learning to be a person in society, in: K. Illeris (Ed)  
907 *Contemporary Theories of Learning* (21-34) (London, Routledge).
- 908 Keay, J. (2006) Developing the physical education profession: New teachers  
909 learning within a subject-based community, *Physical Education & Sport Pedagogy*, 10  
910 (2), 139-157.

- 911 Kellogg Foundation (2001) *Using Logic Models to Bring Together Planning,*  
 912 *Evaluation and Action: Logic Model Development Guide* (Michigan: W.K. Kellogg  
 913 Foundation). Available at: [www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf](http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf)
- 914 Ko B., Wallhead T. & Ward P. (2006) Professional Development Workshops-  
 915 What Do Teachers Learn and Use? *Journal of Teaching in Physical Education*, 25,  
 916 367-412.
- 917 Lieberman, A. & Miller, L. (2008) *Teachers in Professional Communities*  
 918 (New York: Teachers College).
- 919 Loucks-Horsley, S., Love, N., Stiles, K.E., Mundry, S. & Hewson, P.W. (2003)  
 920 *Designing Professional Development for Teachers of Science and Mathematics*  
 921 (Corwin Press, INC).
- 922 Makopoulou, K. & Armour, K. (2011a) Physical Education Teachers' Career-  
 923 long Learning: Getting Personal. *Sport, Education and Society*, 16 (5), 571-591.
- 924 Makopoulou, K. & Armour, K. (2011b) Teachers' Professional Learning in a  
 925 European Learning Society: the case of Physical Education. *Physical Education and*  
 926 *Sport Pedagogy*, i-First Article, 1-17.
- 927 National Foundation for Educational Research -NFER (2001). *Continuing*  
 928 *professional development: LEA & school support for teachers* (Slough, Berkshire,  
 929 NFER).
- 930 O'Sullivan, M. (2007) Creating and Sustaining Communities of Practice  
 931 Among Physical Education Professionals, *Paper presented at the AIESEP-Lboro*  
 932 *Specialist Seminar on PE-CPD, Loughborough, England, Sept 1-3.*

- 933 O'Sullivan, M. & Deglau, D.A. (2006) Principles of Professional Development,  
934 *Journal of Teaching in Physical Education*, 25 (4), 441-449.
- 935 Patton, K. & Griffin, L.L. (2008) Experiences and Patterns of Change in a  
936 Physical Education Teacher Development Project, *Journal of Teaching in Physical*  
937 *Education*, 27, 272- 291.
- 938 Pedder, D., James, M., and macbeath, J. (2005). How teachers value and  
939 practise professional learning. *Research Papers in Education*, 20, 3, 209–243
- 940 Pissanos, B.W., & Allison, P.C. (1996) Continued professional learning: a  
941 topical life History, *Journal of Teaching in Physical Education*, 16, 2-19.
- 942 Schempp, P.G. (1993) Constructing professional knowledge: A case study of an  
943 experienced high school teacher. *Journal of Teaching in Physical Education*, 13, 2-23.
- 944 Shulman, L. (2000). From Minsk To Pinsk: Why A Scholarship Of Teaching  
945 And Learning? *Journal of Scholarship of Teaching and Learning* (JoSoTL), 1 (1) 48-  
946 53
- 947 Sparks, D. (2002) *Designing Powerful Professional Development for Teachers*  
948 *and Principals* (Oxford, OH, National Staff Development Council).
- 949 Stake, R.E. (2005) Case studies, in: N.K. Denzin & Y.S. Lincoln (3<sup>rd</sup> edn)  
950 *Handbook of Qualitative Research* (443-456) (California, Sage publications).
- 951 Stein, M.K., Smith, M.S. & Silver, E.A. (1999) The development of  
952 Professional Developers: Learning to Assist Teachers in New Settings in New Ways,  
953 *Harvard Educational Review*, 69 (3), 237-269.

954           Stroot, S., Collier, C., O'Sullivan, M., & England, K. (1994) Contextual hoops  
955   and hurdles: Workplace conditions in secondary physical education, *Journal of*  
956   *Teaching in Physical Education*, 13, 342-360.

957           Timperley, H. (2008). *Teacher professional learning and development*.  
958   UNESCO/International Academy of Education. Available from  
959   [http://www.ibe.unesco.org/fileadmin/user\\_upload/Publications/Educational\\_Practices/](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Educational_Practices/EdPractices_18.pdf)  
960   [EdPractices\\_18.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Educational_Practices/EdPractices_18.pdf) (accessed 31st August, 2011).

961           Training and Development Agency for Schools -TDA (2007) *Continuing*  
962   *Professional Development: A Strategy for Teachers* (TDAS, April 2004).

963           Ward, P., & Doutis, P. (1999) Toward a consolidation of the knowledge base  
964   for reform in physical education, *Journal of Teaching in Physical Education*, 18, 382-  
965   402.

966           Wayne, A.J., Suk Yoon, K., Zhu, P., Cronen, S., & Garet, M.S. (2008)  
967   Experimenting with teacher professional development: Motives and methods,  
968   *Educational Researcher*, 37 (8), 469-479.

969           West Ed (2000) *Teachers Who Learn Kids Who Achieve. A look at schools with*  
970   *model professional development* (San Francisco: WestEd).